

We claim:

1. A lifting tool adapted for use in combination with a chest retractor to separate and lift one side of an incision in a chest cavity to provide greater access and visibility to a surgeon,  
5 comprising:

a main body having a generally C-shaped configuration, said main body comprising a foot member, an elevation wall member joined to said foot member, and a mounting flange member joined to said elevation wall member; and

a pair of extended hook members mounted to said mounting flange member, each of said  
10 extended hook members comprising a hook end and a body portion.

2. The tool of claim 1, wherein said main body further comprises an edge flange member joined to said foot member.

15 3. The tool of claim 1, wherein said elevation wall member comprises an upper wall member joined to a lower wall member, said upper wall member being joined to said mounting flange member and said lower wall member being joined to said foot member.

4. The tool of claim 1, wherein said extended hook members are adjustably mounted to said  
20 mounting flange member.

5. The tool of claim 4, wherein said extended hook members are adjustably mounted to said mounting flange member by positioning means comprising apertures and tab members.

6. The tool of claim 4, wherein said extended hook members are adjustably mounted to said mounting flange member by positioning means comprising apertures and mechanical fasteners.

7. The tool of claim 3, wherein said foot member is joined to said lower wall member at an  
5 internal angle of about 90 degrees, said lower wall member is joined to said upper wall member at an internal angle of about 122 degrees, and said upper wall member is joined to said mounting flange member at an interior angle of about 90 degrees.

8. The tool of claim 2, wherein said elevation wall member comprises an upper wall  
10 member joined to a lower wall member, said upper wall member being joined to said mounting flange member and said lower wall member being joined to said foot member.

9. The tool of claim 8, wherein said edge flange is joined to said foot member at an interior angle of about 140 degrees, said foot member is joined to said lower wall member at an internal  
15 angle of about 90 degrees, said lower wall member is joined to said upper wall member at an internal angle of about 122 degrees, and said upper wall member is joined to said mounting flange member at an interior angle of about 90 degrees.

10. The tool of claim 9, wherein said edge flange has a planar portion of about 1.01 inches,  
20 said upper wall member has a planar portion of about 1.16 inches, said lower wall member has a planar portion of about 1.84 inches, said foot member has a planar portion of about 0.72 inches, and said edge flange member has a planar portion of about 0.54 inches.

11. The tool of claim 1, wherein with said foot member defining horizontal said mounting flange member is disposed at an angle of about 32 degrees from vertical.

12. The tool of claim 1, wherein said foot member is joined to said elevation wall member  
5 along a radiused junction.

13. The tool of claim 2, wherein said edge member is joined to said foot member along a radiused junction.

10 14. The tool of claim 1, further comprising a chest retractor comprising a generally L-shaped main body member comprising a fixed arm member and a pair of retractor hook members connected thereto, a rack member joined to said fixed arm member, and an adjustable arm member joined to said rack member in a manner allowing the distance between said fixed arm member and said adjustable arm member to be varied, with a pair of arm hook members attached  
15 to said adjustable arm member;

wherein said arm hook members of said adjustable arm member are positioned on said mounting flange member between said extended hook members.

15. The tool of claim 1, further comprising a chest retractor comprising a generally L-shaped  
20 main body member comprising a fixed arm member and a pair of retractor hook members connected thereto, and a rack member joined to said fixed arm member,

wherein said main body is joined to said rack member in a manner allowing the distance between said fixed arm member and said main body to be varied.

16. A method of separating and lifting one side of an incision in a chest wall to provide greater access and visibility to a surgeon, comprising the steps of:

providing a lifting tool comprising a main body having a generally C-shaped configuration, said main body comprising a foot member, an elevation wall member joined to said foot member, and a mounting flange member joined to said elevation wall member, and a pair of extended hook members mounted to said mounting flange member, each of said extended hook members comprising a hook end and a body portion;

providing a chest retractor comprising a generally L-shaped main body member comprising a fixed arm member and a pair of retractor hook members connected thereto, a rack member joined to said fixed arm member, and an adjustable arm member joined to said rack member in a manner allowing the distance between said fixed arm member and said adjustable arm member to be varied, with a pair of arm hook members attached to said adjustable arm member;

positioning said fixed arm hook members on one side of an incision in a chest wall so as to retain one side of the chest wall;

positioning said foot member of said main body on said chest wall adjacent the other side of said incision and positioning said hook ends of said main body of said lifting tool on the other side of said incision in said chest cavity so as to retain the other side of the chest wall;

positioning said arm hook members of said adjustable arm member on said mounting flange member between said extended hook members; and

increasing the distance between said fixed arm member and said adjustable arm member, thereby increasing the distance between said fixed arm member and said mounting flange member, and thereby widening said incision and lifting the other side of said chest wall.

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